

Preliminary Amendment was filed and entered whereby claims 1-25 were cancelled and new claims 26-30 were added.

By this Second Supplemental Preliminary Amendment all pending claims (namely 26-30) are being cancelled and new claims 31-51 are being added.

In summary the status of the claims is:

Original Claims 1-25 were canceled without prejudice (by the Supplemental Preliminary Amendment filed on July 24, 2002) since identical claims are present in allowed parent reissue application Serial No. 07/414,468 (now Re 34,034) of which this application is a second divisional reissue. Claims 26 through 30 were added by the Supplemental Preliminary Amendment of July 24, 2002 but these claims have been cancelled by the present amendment. Claims 31 through 51, added by this Second Supplemental Amendment, are now pending.

This application and continuing application Ser. No. 08/436,863, filed May 8, 1995 (now Re. 37, 141), application Serial No. 07/930,251, filed August 17, 1992 (now abandoned), and application Serial No. 07/414,468, filed Sep. 29, 1989 (now Re. 34,034) are reissues of application Ser. No. 06/839,564, filed Sep. 29, 1987, (now Pat. No. 4,697,281), which is a continuation-in-part of Ser. No. 06/786,641, filed Oct. 11, 1985, (now abandoned). A related application 06/648,945 was filed on Sept. 10, 1984.

A clean copy of the added claims (without underlining) is submitted herewith as Appendix A. Support for the newly submitted claims exists in the following locations (all references are to the printed specification of Re 34,034):

col. 5, lines 4-13 and lines 35-54;

col. 6, lines 10-11;

col. 6, lines 12 - 19;

col. 11, lines 50 through 66;
col. 11, line 66 thru col. 12, line 21; and
col. 13, lines 43-49.

During the interview, the undersigned discussed the background of this application and explained that this application was part of a group of related applications assigned to MLR, LLC. The other pending applications are identified in the attached Appendix B that also lists prior issued patents and applications that have been assigned to MLR, LLC and relate generally to cellular data and voice technologies.

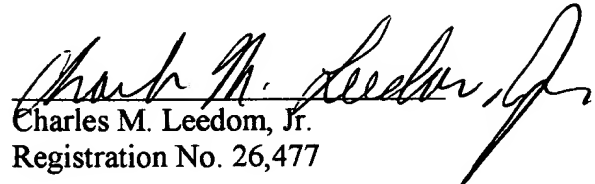
In a telephone conversation subsequent to the November 5 interview, Examiner Maung requested that the undersigned provide copies of the prosecution papers from the office files of those applications upon which the subject application claims priority. Those papers have now been copied and are attached as Appendix C. Further included at Tab 7 of Appendix C are the prosecution papers from application 06/648,945. The papers included are believed to be inclusive of all substantive prosecution papers except for Application 07/930,251. The undersigned was not able to locate a complete copy of this file but will continue to search for a copy of this file. With respect to the remaining files, the Examiner is encouraged to consider the full prosecution files of each application as held by the PTO in its records in case any papers have been inadvertently omitted. If any papers are missing, the Examiner is encouraged to notify the undersigned so that the omitted paper can be added to the undersigned's files.

With respect to the extensive IDS which is being prepared, the Examiner suggested that the reference copies be provided in electronic form for review by him using EIDS. The IDS, including information that can be submitted using EIDS, is nearing completion and will be provided to the Examiner within the next few days.

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Examination of this divisional reissue application is now requested.

Respectfully submitted,


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APPENDIX A

31. A vehicular wireless voice and data communication system, comprising

a. a cellular telephone transceiver mounted within a vehicle for accessing a cellular telephone network operating in accordance with a standardized cellular network operating protocol to send and receive voice and data signals over a cellular telephone network, the cellular telephone transceiver including circuitry specifically adapted to cause the cellular telephone transceiver to respond to cellular transceiver control signals formatted in accordance with a standardized cellular network operating protocol specific to the cellular telephone network;

b. a computing device, including a memory sufficient to allow the computing device to be used in the manner of a portable computer, operable to generate transceiver control signals to control communication over the cellular wireless network from within the vehicle, the control signals being formatted in accordance with a standardized computer data communication protocol that differs from the standardized cellular network operating protocol implemented by the cellular telephone transceiver, and

c. circuitry for connecting the cellular telephone transceiver and the computing device to allow transceiver control signals, generated by the computing device and formatted in accordance with the standardized computer data communication protocol, to be implemented by the cellular telephone transceiver using the standardized cellular network operating protocol.

32. A cellular telephone data transmission apparatus, comprising

a. a cellular telephone transceiver for accessing a cellular wireless network for sending and receiving voice and data signals over a cellular telephone network, the cellular telephone transceiver operating in different modes including a call placement mode and a data transceiving mode;

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b. a computing device including a memory sufficient to allow the computer device to operate as a portable computer, the computing device operating to send and receive data over the cellular telephone network when the cellular transceiver is operating in the data transceiving mode, and

c. a circuit connected with the cellular telephone transceiver and the computing device for determining when the cellular telephone transceiver is operating in the data transceiving mode and causing the computing device to send and receive data over the cellular telephone network only when the transceiver is operating in the data transceiving mode.

33. A combined portable computing and cellular voice and data communication device, comprising

a. a cellular telephone transceiver for accessing a cellular telephone network for either voice or data communication, the cellular transceiver operating in accordance with a standardized cellular network operating protocol to send and receive voice and data signals over a cellular telephone network, the cellular telephone transceiver including circuitry specifically adapted to cause the cellular telephone transceiver to respond to cellular transceiver control signals formatted in accordance with the standardized cellular network operating protocol specific to the cellular telephone network;

b. a portable computer operating to generate transceiver control signals to control communication over the cellular telephone network, the control signals being formatted in accordance with a standardized computer data communication protocol that differs from the standardized cellular network operating protocol implemented by the cellular telephone transceiver, the portable computer including computer memory sufficient to allow for portable computer uses other than generating cellular telephone transceiver control signals; and

c. circuitry for connecting the cellular telephone transceiver and the portable computer to allow transceiver control signals, generated by the portable computer and formatted in accordance with the standardized computer data communication protocol, to be implemented by the cellular telephone transceiver using the standardized cellular network operating protocol,

whereby the portable computer, in one mode, may be used to originate control signals to control the operation of the transceiver to control the transceiver to allow user data processed by the portable computer to be sent over the cellular network and to allow user data to be received by the portable computer for subsequent processing by the portable computer and, in another mode, may be used for data processing functions other than control of the cellular telephone transceiver.

34. A system for transferring data between a mobile station and at least one fixed station over a cellular telephone network comprising:

a vehicular mobile radio telephone network access device capable of bidirectionally communicating voice and data between the mobile station and a fixed station;

a computer in said vehicle, the computer providing and receiving data signals;

an interface circuit connected between the computer and the vehicular mobile radio telephone network access device for transmitting data signals to and from the vehicular mobile radio telephone network access device, said interface circuit providing lines for connection to the vehicular mobile radio telephone network access device, said lines including:

a data transmit line for transmitting data signals received from the computer to the vehicular mobile radio telephone network access device;

a data receive line for transmitting data signals from the vehicular mobile radio telephone network access device to the computer; and

plural control lines for providing at least one digital control signal, including a dial control signal, to the vehicular mobile radio telephone network access device to control the operation of the device;

dialing circuit in said interface circuit connected to at least one of the control lines for allowing the computer to cause the vehicular mobile radio telephone network access device to set up a cellular call; and

a program residing in said computer, said program causing said dialing means to set up the cellular call over the radio telephone network.

35. The cellular telephone data communication system of claim 34, further including a modem operably connected to the computer for modulating data signals received from the computer for transmission over the vehicular mobile radio telephone network access device and for demodulating data signals received from the vehicular mobile radio telephone network access device.

36. The cellular telephone data communication system of claim 34 wherein said interface circuit inserts error correction bits into said data signal.

37. The cellular telephone data communication system of claim 34 wherein said data signal is packetized.

38. The cellular telephone data communication system of claim 37 wherein said packetized data signal comprises packets of variable length, said packet length adjusted according to signal quality.

39. The cellular telephone data communication system of claim 34 wherein said computer, said interface device and said vehicular mobile radio telephone network access device is powered by a vehicle battery.

40. A cellular computer data transmission system disposed in a vehicle for communicating bidirectional computer data messages to and from a fixed location over a cellular telephone network, the system comprising a radio transceiver for communicating on the cellular network, a computer originating and receiving text messages and an interface for providing a data path between the computer and the radio transceiver, the interface containing a modem for modulating and demodulating data signals for transmission on the cellular telephone network, a controller for controlling access to the cellular telephone network, and parallel signal lines between the controller and the radio transceiver including at least a transmit signal line, a receive signal line, and a control line, whereby text messages are communicated between the computer in the vehicle and a fixed station over the cellular network.

41. The cellular computer data transmission system of claim 40 wherein the text messages contain error correcting bits.

42. The cellular computer data transmission system of claim 40 wherein the text messages are packetized.

43. The cellular computer data transmission system of claim 42 wherein the packetized text messages comprise packets of variable length, the length adjusted according to error rate.

44. A vehicle mobile computer communications system comprising:

a radio transceiver means for communicating over a cellular telephone network;

a computer means running at least one application program providing and receiving text messages;

an interface means disposed between said computer means and said radio transceiver means, said interface means containing a modem and a controller, said controller accessing said radio transceiver means through parallel signal lines including at least a transmit line, a receive line and plurality of control lines;

said interface means transferring text messages from said application program in said computer means to said radio transceiver means for transmission over said cellular telephone network and transferring received text messages from said radio transceiver means to said application in said computer means.

45. The vehicle mobile computer communications system of claim 44 wherein said controller in said interface means inserts error correction bits into said text messages.

46. The vehicle mobile computer communications system of claim 44 further comprising dial means contained in said interface means for causing said transceiver means to place a call over said cellular communications network.

47. The vehicle mobile computer communications system of claim 46 wherein said application program causes said dial means to automatically place a call over said cellular communications network.

48. A cellular telephone data communication system for communicating data over a cellular telephone system between a fixed station and a mobile station comprising:

at least one mobile radio transceiver coupled to a data processor, said mobile radio transceiver capable of bidirectionally communicating voice and data between said mobile station and said fixed station, said data processor capable of executing at least one application program;

said application program causing said mobile radio transceiver to establish communication with said fixed station upon the occurrence of a predetermined event, said application program then sending data to said fixed station.

49. The cellular telephone data communication system of claim 48 further comprising an interface disposed between said radio transceiver and said data processor, said interface allowing said data processor to control said radio transceiver.

50. The cellular telephone data communication system of claim 49 wherein said interface inserts error correction bits into said data.

51. The cellular telephone data communication system of claim 48 wherein said data is packetized.

APPENDIX B

**MLR PATENTS
RECORDED ASSIGNMENTS SHOWING CHAIN OF TITLE**

Patent Application Family	Serial No.	Filed	Docket No.	Recorded Assignments			
				Reel	Frame	Assignor	Assignee
I. Title: Cellular Telephone Data Communication System and Method Inventor(s): Harry M. O'Sullivan	06/786,641	10/11/85	0301-418	4475	668	Dana Verrill	Spectrum Cellular Communications Corporation, Inc.
	06/839,564 (4,697,281)	3/14/86	0301-39				
	07/414,468 (RE34,034)	9/29/89	0301-20	4535	905-906	Harry M. O'Sullivan	Spectrum Cellular Communications Corporation, Inc.
	07/928,045	8/11/92	0301-69				
	07/930,251	8/17/92	0301-74	5864 (Name change)	528-534	Spectrum Cellular Communications Corporation	Spectrum Cellular Corporation
	08/436,863 (RE37,141)	5/8/95	0301-350				
	09/835,464 (2 nd Div.)	4/17/01	0301-415	5854 (merger)	522-527	Spectrum Cellular Corporation	Spectrum Information Technologies, Inc.
				10327	981-984	Spectrum Information Technologies, Inc.	MLR Partners
II. Title: Portable Hybrid Communication System and Methods Inventor(s): Harry M. O'Sullivan	07/301,521 (4,972,457)	1/19/89	0301-19	5022	917-918	Harry M. O'Sullivan	Spectrum Cellular Corporation
	07/831,671 (Reissue)	2/5/92	0301-60	5416	629-630	Spectrum Cellular Corporation	Spectrum Information Technologies, Inc.
	10/141,880 (Divisional)	5/10/02	0301-423				

Patent Application Family	Serial No.	Filed	Docket No.	Recorded Assignments			
				Reel	Frame	Assignor	Assignee
				10327	981-984	Spectrum Information Technologies, Inc.	MLR Partners
				11213	268-270	MLR Partners	MLR, LLC
III. Title: System and Method for Interfacing Computers to Diverse Telephone Networks Inventor(s): Harry M. O'Sullivan	07/531,762 (5,127,041)	6/1/90	0301-52	5400	296-298	Harry M. O'Sullivan	Spectrum Cellular Corporation
	07/866,879	4/10/92	0301-70				
	08/178,474 (5,353,334)	1/6/94	0301-229				
	08/316,724 (5,640,444)	10/3/94	0301-279				
				5777	198	Spectrum Cellular Corporation	Spectrum Information Technologies, Inc.
				10327	981-984	Spectrum Information Technologies, Inc.	MLR Partners
				11213	268-270	MLR Partners	MLR, LLC
IV. Title: Adaptive Omni-Modal Radio Apparatus and Methods Inventor(s): Joseph B. Sainton Eric J. Robinson Charles M. Leedom	08/167,003	12/15/93	0301-400	9226	648-651	Joseph B. Sainton Charles M. Leedom Jr. Eric J. Robinson	Spectrum Information Technologies, Inc.
	08/707,262 (5,845,985)	9/4/96	0301-408				
	09/149,292 (6,134,453)	9/9/98	0301-410				
	09/670,696 (Divisional)	9/28/00	0301-396	9366 (duplicate recording)	299-302	Joseph B. Sainton Charles M. Leedom Jr. Eric J. Robinson	Spectrum Information Technologies, Inc.
	08/167,002	12/15/93	0357-3				
	08/709,112 (5,761,621)	9/6/96	0301-409	9670	64-65	Spectrum Information Technologies, Inc.	Charles M. Leedom, Jr.
	09/392,676 (Reissue)	9/8/99	0301-411				

Patent Application Family	Serial No.	Filed	Docket No.	Recorded Assignments			
				Reel	Frame	Assignor	Assignee
				10304 (added Sainton)	722-726	Joseph B. Sainton Charles M. Leedom Jr. Eric J. Robinson	Spectrum Information Technologies, Inc.
				11213	250-252	Charles M. Leedom Jr.	MLR, LLC
				12177 (corr. Pat No.)	268-270	Spectrum Information Technologies, Inc.	Charles M. Leedom, Jr.
V. Title: Programmable Universal Interface System Inventor(s): Joseph B. Sainton	07/863,568 (5,249,218)	4/6/92	0301-68	6262	615-616	Joseph B. Sainton	Spectrum Information Technologies, Inc.
	08/096,895 (5,367,563)	11/22/94	0301-119	10327	981-984	Spectrum Information Technologies, Inc.	MLR Partners
				11213	268-270	MLR Partners	MLR, LLC
VI. Title: A Wireless, Multi-Modal Access Device and Method Inventor(s): Charles M. Leedom Jr.	60/191,121	3/22/00	0301-412	11213	250-252	Charles M. Leedom Jr.	MLR, LLC
	09/813,165	3/21/01	0301-414				
VII. Title: Modem for Selectively Connecting to a Land Line or to a Cellular Telephone (Assigned by Compaq) Inventor(s): Paul E. Nagel Robin T. Castell Randall L. Jones Thomas G. Bunch	07/972,949	11/6/92	0301-398 0301-416	6395	500-502	Paul E. Nagel Robin T. Castell	Compaq Computer Corporation
	08/148,661 (6,295,460) 09/953,211 (Divisional)	11/5/93 9/17/01		6970	190-194	Paul E. Nagel Robin T. Castell Randall L. Jones Thomas G. Bunch	Compaq Computer Corporation

Patent Application Family	Serial No.	Filed	Docket No.	Recorded Assignments			
				Reel	Frame	Assignor	Assignee
				12817	903-905	Compaq Computer Corporation	MLR, LLC

APPENDIX C

Prosecution Papers

Tab 1	06/786,641	filed 10/11/85
Tab 2	06/839,564 (4,697,281)	filed 3/14/86
Tab 3	07/414,468 (RE34,034)	filed 9/29/89
Tab 4	07/928,045	filed 8/11/92
Tab 5	07/930,251	filed 8/17/92
Tab 6	08/436,863 (RE37,141)	filed 5/08/95
Tab 7	06/648,945	filed 9/10/84